

Application No.: 10/026,171
Response dated: March 25, 2008
Reply to Office Action of: December 27, 2007

REMARKS

Reconsideration of the present claims is respectfully requested.

Claims 1, 3, 5-10, 14-22, and 24-38 are pending. Claims 2, 4, 11, 12, 13, and 23 have been cancelled.

Claims 1, 6, 8, 10, 14, 21, 27, 28, 29, 30, 34, and 35 have been amended to recite that the activator and the metallocene catalyst compound are heated to the temperature for about 30 minutes to about 3 hours. Support for these amendments may be found, for example, at paragraph [0061] of the Specification.

Claim 34 has been amended to correct a typographical error in the numbering of the claims.

No new matter has been added.

Supplemental Declarations under 37 CFR § 1.132

The Action indicates that the conditions of the experiment for the reference compared to the instant invention did not use the closest parameters between the two disclosures to compare the results. The Action further comments that it cannot be determined what is being shown in the black and white scanned images of the Declaration. As the declarations disclose, Applicants conducted experiments under essentially identical conditions except that the inventive examples include Applicants' recited step of adding heat during the reaction between the metallocenes and the MAO, as compared to Razavi I or II, wherein the same metallocenes and the MAO are combined at ambient conditions, and the catalyst and support are heated at 110°C consistent with the Razavi I or II disclosures.

Applicants have made a direct comparison between the cited prior art and the presently claimed invention. Regarding the photographs, Applicants clearly disclose that the reactors of Razavi I and II result in fouling of the reactors in contrast to the reactors of the presently claimed invention. Color copies of the photographs were hand delivered to the Examiners' Supervisor on March 18, 2008.

Accordingly, Applicants have provided evidence and shown that neither Razavi I or II disclose or suggest Applicants' presently claimed invention.

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Rejections under 35 USC § 103

Claims 1, 3, 5-10, 14-22, and 24-38 were rejected under 35 USC § 103(a) as being unpatentable over either of Razavi I and Razavi II; or under 35 USC § 103(a) as obvious over Uwai. Applicants respectfully disagree.

The Action maintains the rejection of Claims 1, 3, 5-12, 14-22 and 24-38 as being obvious in view of Razavi I or II. The Action maintains that since Razavi I or II disclose that the metallocene and the alumoxane is preformed at a temperature comprised between 15 and 50°C, preferably about 25°C, that Razavi I or II do teach that the temperature can be adjusted and as such, this reaction temperature is "indeed a result effective variable."

However, Razavi I or II or Uwai fail to disclose that heating of the reaction mixture has an effect on the polymer produced. In addition, Applicants have amended the presently claimed invention to clarify that the components are heated for about 30 minutes to about 3 hours at the recited temperature. As such, Applicants' recited heating step requires the deliberate heating of the reaction mixture. This is in contrast to Razavi I or II, which merely disclose mixing the two components together for 10 minutes (see Page 10, lines 17-22, Razavi I) to obtain the metallocenium cation.

Albeit, the reaction between a metallocene and MAO is a known exothermic reaction, which releases heat. The increase in temperature resultant from combination of two reactants at ambient temperature may increase slightly as the metallocenium cation is produced. However, the possible increase in temperature which may result from such facile mixing as disclosed by Razavi I or II cannot be considered to be chemically tantamount with Applicants' recited step in which the reaction components are deliberately heated from 60 to 125°C for about 30 minutes to about 3 hours. Likewise, Uwai discloses mere mixing of the components under ambient conditions, and, thus, fails to disclose Applicants' recited heating step.

Accordingly, Applicants do not recite a mere variation of temperature on a known process step in which the temperature is known to be critical, but in fact, recite an entirely separate step which Razavi I, Razavi II, and Uwai each fail to disclose or suggest.

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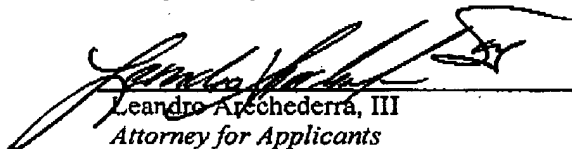
As such, none of the cited prior art provides any disclosure or suggestion which even remotely recognizes or suggests the deliberate heating of the catalyst and the activator prior to contacting with the support is a critical variable which achieves a recognized result. The references merely provide for combining the two components under essentially ambient conditions and then contacting with the support. Accordingly, Applicants' presently claimed invention cannot be considered an optimization of a result effective variable since no such variable existed prior to Applicants' invention. Furthermore, in the inventive Examples described in the Affidavits submitted, Applicants have shown vast improvement that are unexpected in view of the cited prior art.

Thus, Applicants respectfully request that all rejections be withdrawn and solicit a prompt notice of allowability. In the alternative, Applicants invite the Office to telephone the undersigned attorney if there are any other issues outstanding which have not been presented to the Office's satisfaction.

Respectfully submitted,

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Date



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